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Harmful Fisheries Subsidies in Southeast Asia (ASEAN)

Wen Chiat Lee*[a], K. Kuperan Viswanathan[b]

[a]*Department of Economics and Agribusiness, School of Economics Finance and Banking, Universiti Utara Malaysia*
[b]*Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia*
Corresponding email: lwchiat@uum.edu.my

Abstract

Fisheries subsidies are crucial to the poor small scale fishers in Southeast Asia (ASEAN) as the fishers depend the subsidies for a living. However, the fisheries subsidies might also bring harm to the fisheries resources as the fishers use the fisheries subsidies to build the capacity to catch more fish. There is more than five million fishers in ASEAN and 90 percent of fishers are poor. The poor fishers need to be assisted by the ASEAN government to increase the livelihood. ASEAN government give away many subsidies to the fishers every year. The fishers in the top 6 ASEAN nations receive $3.3 billion of subsidies in year 2011 alone and 64 percent are allocated for harmful subsidies. The harmful subsidies should be avoided and fisheries subsidies should be managed well to ensure sustainability of fisheries resources in the long run. In this paper, we discuss the current status of harmful fisheries subsidies in ASEAN and recommend ways to balance between increasing livelihood of ASEAN fishers and ensure sustainability of fisheries resources in ASEAN seawaters. The ways recommended are relocation of small scale fishers to aquaculture, co-management and deep sea aquaculture that involves government.

Keywords: Fisheries subsidies, harmful fisheries subsidies, aquaculture, co-management and deep sea aquaculture.

1. INTRODUCTION

Fisheries subsidies are financial payments from public entities to the fishing sector to make the fishing sector more profit than it would be otherwise (Sumaila et al., 2013). Fisheries subsidies are government actions or inactions that are specific to the fishing industry that modifies the profits of the industry in the short-, medium- and long term (FAO, 2003). There are different types of subsidies such as fuel tax rebate, provision of landing site facilities, investment grants and no resource access fees. The fisheries subsidies are good in providing support to improve the capacity of the fishers. The objective of fisheries subsidies is to help the poor artisanal fishers to maintain their livings. Currently, fish is the primary resources for 950 million people worldwide. Fish also provides employment for 200 million people directly depending on ocean fishing for their livelihoods. However, there is a question on whether fisheries subsidies bring harm to the nation such as overfishing that results in depleting fisheries resources. Fisheries subsidies also pose threat to the fisheries resources as it leads to overfishing. Many of the US$ 32 billion fisheries subsidies are used to increase fishing capacity to catch more fish (Sumaila & Pauly, 2006). Fisheries subsidies for the fishers mean that investment in capacity increases. The fishers are able to purchase new vessels and equipments and hired fishing staffs to increase fishing efforts. Thus, more work is required to address the linkages between fisheries subsidies and fisheries resources sustainability (Porter, 2001). Long-time sustainability of the fisheries resources are important to ensure adequate protein for the future generation. In this study, we explore the impacts of fisheries subsidies in

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Southeast Asia. The impacts of fisheries subsidies can be harmful or benefiting. This paper presents the current status of the harmful subsidies in ASEAN and recommends fisheries policies to manage the subsidies and ensure sustainability fisheries resources in Southeast Asia.

2. TYPES OF FISHERIES SUBSIDIES WORLDWIDE

Beneficial subsidies

Beneficial subsidies are subsidies that reducing capacity effort and help the artisanal fishers increase landing and income, minimizing by-catch. The examples of beneficial subsidies are subsidies for research and development and fisheries management.

Capacity-enhancing subsidies

Capacity-enhancing subsidies are subsidies that are defined as those that incentivize overfishing. Capacity enhancing subsidies are also called harmful subsidies because it can lead to overfishing (WWF). Capacity enhancing subsidies provide financial support for boat construction and modernization and fuel equipment directly promote overfishing (World Wildlife Fund, 2011). The capacity enhancing subsidies would lead to depletion of fisheries resources. Thus, the capacity enhancing subsidies must be well managed to prevent overfishing.

3. ASEAN FISHERIES SUBSIDIES

The ASEAN countries are promoting harmful subsidies and overfishing. More than 50 percent of the subsidies are spent on capacity-enhancing subsidies in 5 major ASEAN countries. The five major ASEAN countries are Malaysia, Indonesia, Vietnam, Thailand and Philippines. According to FAO (2014), these five countries produce 21.6 million tonnes of fish every year or 23 percent of the world fisheries production and 81.4 percent of ASEAN fisheries production in year 2011. The high spending on harmful fisheries subsidies in ASEAN depletes the fisheries resources in the ASEAN seawaters. These five ASEAN countries governments should reduce the harmful subsidies to be spent to catch fisheries resources. The five ASEAN countries should spend more financial resources on beneficial subsidies such as subsidies for research and development and subsidies for managing fisheries resources. We present the ASEAN fisheries subsidies as compared to the world, north America and Europe subsidies in Table 1 to identify the financial allocation given by the ASEAN government as subsidies. This provides a comprehensive picture on the subsidies situation in ASEAN 6 major fish producers.

Table 1: Total Fisheries subsidies, beneficial subsidies, harmful subsidies and ambiguous subsidies for ASEAN in year 2011

Countries	Total subsidies (US$ millions)	Beneficial (US$ millions)	Harmful (US$ millions)	Ambiguous (US$ millions)	Number of fishers
1. Malaysia	592	0	497	95	134,110
2. Indonesia	600	46	369	185	2,755,178
3. Thailand	400	44	312	44	160,000
4. Vietnam	600	46	369	185	500,000
5. Myanmar	300	22	64	214	2,952,800
6. Philippines	900	50	550	300	1,907,435
7. Asia	16000	4056	9971	1973	
8.World	35000	11250	20000	3750	
9.North America	6000	4080	720	1200	
10. Europe	8700	1567	6025	1108	

** Sumaila et. al., 2013 and Food and Agriculture Organization (2014).

From Table 1, surprisingly, there is no financial resource spent on beneficial subsidies such as research and development and fisheries resources management in Malaysia in year 2011. Malaysia spends US$497 millions on harmful subsidies or 83 percent of their total subsidies on harmful subsidies. This leads to the over depletion of the fisheries resources. Malaysia is not the only country in Southeast Asia that spend more than 50 percent of their subsidies on harmful subsidies. Indonesia spent 61.5 percent, Thailand 78 percent, Vietnam 61.5 percent and Philippines 61.1% of total subsidies on harmful subsidies. In contrast, North America, a region famous for

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fisheries management, spent just a meager 12 percent on harmful subsidies and 68 percent on beneficial subsidies aim at protecting fisheries stocks. There is a stark difference between ASEAN and North America. ASEAN fisheries resources are depleting whereas North America fisheries resources are improving. The fisheries diversities in North America such as tuna, salmon, toothfish are preserved in a sustainable way. ASEAN countries government should learn from the North America to invest more subsidies on beneficial subsidies so that the main fisheries species are protected.

Table 2: Fisheries subsidies per fisher 2011

Countries	Fisheries subsidies per fisher (US$)	Beneficial fisheries subsidies per fisher (US$)	Harmful fisheries subsidies per fisher (US$)	Ambiguous fisheries subsidies per fisher (US$)
1. Indonesia	217.77	16.66	133.53	67.15
2. Malaysia	4414	0	3706	708
3. Thailand	2500	275	1950	275
4. Vietnam	1200	92	738	370
5. Philippines	471.64	26.27	288.55	157.28
6. Myanmar	101.6	7.45	21.67	72.47
7.ASEAN for six nations	769.24	47.17	490.07	231.60
8. World	909	292.20	519.48	97.40
9. Asia	623.5	158.10	388.61	76.95
10. Europe	51167.31	9215.60	35448.68	6515.03
11.North America	11155.41	7612.88	1345.45	2235.08

**Calculations are based on Table 2.

From Table 2, ASEAN fisheries subsidies per fisher is US$769.24 and well below the world average of US$ 909. The beneficial fisheries subsidies is a miniscule US$ 47.17, much lower than the world average of US$ 292.20. This implies that ASEAN fisheries government are not devoting their effort in protecting the fisheries stocks and this results in overdepleting of fisheries resources. Three countries in ASEAN namely Thailand, Malaysia and Philippines have higher harmful subsidies per fisher than the Asia harmful fisheries per fisher (US$388.61). This indicates that the three countries spend more subsidies on building the fisheries capacity to catch more fish and depletes the fisheries resources.

4. RECOMMENDATIONS FOR FUTURE SUSTAINABILITY OF FISHERIES RESOURCES IN SOUTHEAST ASIA

The Southeast Asian nations should phase out the harmful subsidies that creates overfishing and reducing fishing stocks. Southeast Asian should have subsidies reform program like what the Norway and North America have done. Fisheries subsidies in Southeast Asia should aim at conserving fish stocks for future. The fisheries subsidies policies of Southeast Asia in the future should not ignore the idea of exploitation of marine capture resources that ultimately depends on the level of available fish stocks and the large share of subsidies given to fuel the race to fish. As mentioned by Till (2010), policies that ignore the negative impact of harmful subsidies on fisheries resources might encourages inefficient and unsustainable fishing as well as misallocation of funds.

The future fisheries subsidies should aim at maintaining sustainability of fisheries resources. Fishing capacity enhancement subsidies should be reduced and eventually phased out for the fisheries stocks to grow at sustainable rate. Subsidies for research and development should be enhanced to estimate fisheries stocks and ensure the fish stocks grow at sustainable rate. Fisheries stocks data should be recorded to calculate maximum sustainable yield for the fishers.

The fisheries social scientists also have a role to play. The fisheries scientists should advise the government of Southeast Asia on the importance of sustainability of fisheries stocks. The fisheries scientists should tell the government to give more beneficial fisheries subsidies. The government and fisheries subsidies can work hand-in-hand to educate and create awareness among the Southeast Asia fishers in order to conserve fisheries stocks. The fishers should be briefed on the importance of sustainable fisheries stocks for future use and not focused on short-term economic profits in the fishing industries by using fisheries subsidies to enhance fishing capacity. Ecological fisheries management should be encouraged by the government. Fisheries social scientists should

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assist government to formulate fisheries subsidies policies towards achieving ecological fisheries management and ensure sustainability fisheries resources.

RELOCATION OF FISHERS TO AQUACULTURE AS A WAY TO INCREASE LIVELIHOOD OF SMALL SCALE FISHERS

The government of Southeast Asia should also relocate some of the fishers to aquaculture activities. This effort can reduce overcapacity as numbers of fishers are reduced. Productivity of fishers can also be increased. The relocated fishers are able to find new job opportunities at the aquaculture sector and produce more aquaculture fish to meet the local and foreign demands. The other benefit of relocating marine fishers to aquaculture is reducing the fuel subsidies to fishers. Reducing fuel subsidies can reduce overcapacity and overfishing and eliminate price distortion of the fishers (Harper et al., 2012).

There are many ponds in Southeast Asia such as Rawang fishing pond in Malaysia that can be utilized to do aquaculture farming. Government should provide the environment to enable the fishers to become aquaculture entrepreneurs. The poor fishers should be empowered to utilize the leftover ponds to raise fish for aquaculture purpose. Government can set up banks to provide funding at the simple interest and not compounding interest, as not to burden the poor fishers. Fishers should be empowered to pay back the amount of loans according to their wishers. Government can introduce greater flexibility into the loan products. Government can give flexi-loan for the fishers and allow the fishers to pay in smaller installments over a longer time period. This effort increases the fishers confident to do well in business because the fishers' aquaculture businesses are supported by the government. The interest charged by the government on the fishers must be low in order to help the fishers generate enough income to lift them out of poverty. Yunus (2007) stated that the low interest should be 10 to 15 percent of the cost of funds. The low interest loans induce the poor relocated fishers to borrow the loans to engage in aquaculture development.

CO-MANAGEMENT IN AQUACULTURE

Co-management is indeed needed to develop the aquaculture sector. Co-management represents a variety of arrangements that result in sharing of responsibility and authority for management between resource users and other stakeholders (including their representatives) and the government (Berkes et al., 2001). In other words, co-management refers to the cooperation of fisheries communities and the government to manage the fisheries resources of a country. The reasons for promoting co-management or participation in management by all the stakeholders and the government is to improve compliance with regulation (Kaplan & McCay, 2004), reduce the costs of data collection, monitoring and enforcement and lead to the empowerment of local communities (Pomeroy & Berkes, 1997); provide more locally relevant management plans (Garaway & Arthur, 2004). Co-management is also used to reduce the conflicts between the fishers and the governments and proven effective (Noble, 2000). In aquaculture case, the government should empower the fishers to manage the ponds to raise fish. The relocated poor fishers are able to take part in the aquaculture program to select the program that suits the fishers' needs. The Non-governmental organization (NGO's) efforts are also needed as government's efforts and resources are limited. Livestock program such as vaccination for fish and training on how to manage the aquaculture fish can be conducted by the NGO's with the supports from government.

POOR FISHERS MUST BE VIEWED AS PRODUCTIVE ENTREPRENEURS

Poor fishers are commonly being viewed as unproductive workers that do not have the opportunity to become successful entrepreneurs. Economic theories often view entrepreneurship is unique and this rare talents are only owned by rich fishers. This resulted in poor fishers are being discriminated from any benefit and could not escape from the poverty trap. Governments in Southeast Asian countries must be sincere in helping the poor fishers to become aquaculture entrepreneurs. The government must provide microcredit to the fishers to help the fishers generate the income to lift them out of poverty. Microcredit is channeled to the poor fishers with the objective of helping them to become entrepreneurs. No collateral is needed by the poor fishers to obtain financial support. NGOs can be employed to oversee the operations of the aquaculture projects.

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We can learn from the success stories of Muhammad Yunus, the founder of Grameen Bank and a Nobel Peace Prize Laureatte, has founded Grameen Motsho Pashusampad (Fisheries and Livestock) Foundation in 1994. He successfully propagated the use of fish ponds and livestock breeding programs in Bangladesh. Muhammad Yunus, through his Grameen Motsho Pashusampad Foundation reached an understanding with the local fishers and people and organized over 3,000 poor people into groups who raise fish and work to maintain the ponds. The gross income of the poor fishers increase significantly and they enjoy the fruits of development. When fishers' income are rich, the tendency to enter illegal fishing that depletes the fisheries resources can be reduced.

DEEP SEA AQUACULTURE – A NEW APPROACH OF AQUACULTURE THAT INVOLVES GOVERNMENT

The governments in ASEAN must work hand-in-hand with the poor fishers to make aquaculture a success. The government needs to help the poor fishers design and program the production based on market needs on fisheries. There is success story in Malaysia on how to raise and grow aquaculture fisheries. The government needs to develop an island that is specifically used for aquaculture purposes. Poor fishers are allowed to carry out deep sea aquaculture activities at the islands and breed artificial fishing stock. The example of those done is located in Pulau Aman, Penang, Malaysia, of which the fish can be sold at very high price. The Jenahak, local name of the fish species is breeded and sold at a comfortable price of RM45 per kg. Besides that, Pantai Merdeka in Penang is also a perfect example of success deep aquaculture being done by the Malaysian government.

In deep sea aquaculture, the deep sea water is channeled to the artificial island for the purpose of aquaculture. The deep sea fishing is really a lucrative market. The fish reared from the deep sea aquaculture are of big size and fetch a good price. We need Non-governmental organization (NGOs) to help us to publicize the idea and help the government facilitate the poor relocated fishers in managing the deep sea aquaculture. The credit can be provided by the government through a rural or local bank. For example, there is a local agriculture bank, called Bank Pertanian Malaysian that provides credit and funding to the poor fishers. The NGOs provide support and help the fishers to manage the deep sea aquaculture through a concept called Build-Operate-Transfer (BOT). The government and the NGOs do not take over the deep sea aquaculture pond of the fishers. The fishers are empowered to raise the deep sea aquaculture fish.

5. CONCLUSION

Fisheries subsidies is essential as it is important to uphold the living standards of small-scale fishers in Southeast Asian as there are still a lot of poor fishers in Southeast Asia. 97 percent of the global fishers live in developing countries including ASEAN and 90 percent of the global fishers are poor and small-scale (Global Commission Report, 2014). However, the fisheries subsidies must be well managed by the governments of ASEAN to prevent it from harmful subsidies that results in depletion of fisheries resources. The 10 ASEAN governments should cooperate and join hands to reduce harmful subsidies. Moreover, the beneficial subsidies such as subsidies for fisheries research and fisheries management should be encouraged by ASEAN governments to assist small-scale fishers in increasing their standards of livings as well as conserving the fisheries resources underneath the sea water.

ASEAN governments should ensure that the beneficial fisheries subsidies can enhance fisheries sustainability in the long run. Subsidies for conservation effort on fisheries stocks should be allocated by the ASEAN government to ensure fisheries sustainability. The ASEAN government can pool the financial resources and set up ASEAN fisheries committee such as SEAFDEC to manage the resources for long-term fisheries sustainability. Subsidies for relocation of small-scale fishers to aquaculture activities should be encouraged to prevent overfishing in the marine waters.

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